

# Abstract

The invention relates to a microscope system (1) comprising a lens system (9) that defines a field of illumination. A detection light beam (12), which is detected in terms of pixels, is emitted from the sample (10). An electronic circuit (14) is connected to the detector (20), said circuit comprising a memory unit (15) with a wavelength-dependent luminosity distribution of a field of illumination (46) of the lenses contained in the microscope system (1) saved therein. A controllable element (13), which controls the intensity of the illuminating light beam (5) in terms of pixels according to the stored wavelength-dependent luminosity distribution, is provided in the illuminating light beam (5), in order to illuminate the field of illumination as homogeneously as possible and the electronic circuit (14) computes the saved wavelength luminosity distribution in terms of pixels in order to produce a homogeneously illuminated image field (40).